8EHQ-1102-13706

EASTMAN

Eastman Chemical Company
Kingsport, Tennessee 37662
Phone: (423) 229-2000

November 19, 2002

Document Control Office (7407M)
EPA East - Room G99
Attn: Section 8(e)
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460-0001

Dear Sir or Madam:

This letter is in response to your request to provide additional information to the Agency with respect to the potential uses of the tested chemical and other available information to assist EPA in assessing potential exposures as well as any voluntary risk management actions. The assigned 8(e) reference number for the substance in question is **8EHQ-0896-13706**.

The material reported in 8EHQ-0896-13706 (cyclopropanemethanol (CPMO)) was manufactured for use as a chemical intermediate and/or a pharmaceutical intermediate. The last production run for this material was completed in August 1998. At this time, there is no intention of manufacturing additional material.

As Eastman Chemical Company has previously informed EPA in a prior submission (8EHQ-98-14177), CPMO is one of a family of cyclopropyl carbonyl compounds that are expected to exhibit similar toxicological effects. Additional 8(e) submissions for this family of chemical compounds include: 8EHQ-97-13886, 8EHQ-1097-14030, 8EHQ-98-14234, 8EHQ-00-14662, and 8EHQ-98-14207.

A MSDS for CPMO is attached for your convenience. Voluntary Risk management actions followed by Eastman Chemical Company when working with the cyclopropyl carbonyl family include the following:

General: Restrict work area access to those individuals who are fully informed of the hazards of these substances and are using the following precautionary measures.

Exposure limits: For chemicals containing the cyclopropanecarbonyl structure, Eastman Chemical Company is using an exposure limit of 0.01 ppm (ml/m^3) as an 8-hour time-weighted average (TWA).

Ventilation: Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne concentrations below 0.01 ppm as an 8-hour time-weighted average (TWA). Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Conduct laboratory operations in a fume hood that has been tested and shown to have a face velocity between 80 and 120 feet per minute.

Respiratory protection: Use of respiratory protection is required for working in the immediate manufacturing area and for any operation that is not fully enclosed such as making and breaking connections, making transfers, drumming, maintenance operations, etc. Respiratory protection must be used if engineering controls do not maintain airborne concentrations below 0.01 ppm as an 8-hour time-weighted average (TWA). Supplied air respirators are recommended.

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Responsible Care:®
A Public Commitment

Air-purifying respirators may be considered for operations in which it is not feasible to use supplied air respirators. The GME cartridge manufactured by Mine Safety Appliances Company (www.msanet.com) has been tested with CPCA according to a test method prescribed by the EPA. The data suggest that air-purifying respirators should not be used for exposures exceeding 5 ppm as an 8-hour TWA. A screening study indicates that the GME cartridge is effective for CPMK. Based on their relative boiling points, the GME cartridge is also expected to be suitable for use with CPC-Acid, CPMO, and MCPC.

Eye/Face protection: Wear chemical splash goggles. Also wear a face shield when handling CPC-Acid or CPMK as these chemicals are corrosive according to US Department of Transportation test protocols. If respiratory protection is indicated (see above), wear a full-facepiece respirator.

Skin protection: Butyl rubber has been tested with CPCA according to ASTM F739-91 for breakthrough and was found to be far superior in resistance than neoprene rubber or nitrile rubber. Screening studies indicate that butyl rubber is effective for CPC-Acid and CPMK. Wear butyl rubber gloves. Inspect gloves for leaks or other defects prior to each use. Laboratory coats are recommended for laboratories and coveralls for production facilities. Consideration should be given to the use of polymer-coated aprons, smocks, or coveralls when there is a potential risk of a splash from an open operation.

Recommended Decontamination Facilities: Eye baths, hand washing facilities, and safety showers must be available. Since these substances may be readily absorbed through the skin and CPMK and CPC-Acid are corrosive, it is very important to be able to immediately flush the eyes and wash the skin in case of contact with the liquid.

Miscellaneous: Make certain that contaminated trash (pipettes, syringes, clean-up wipes, etc.) are cleaned and/or appropriately sealed before disposing in approved waste containers. Store sample bottles in a fume hood or, if sealed, in a vented storage cabinet.

Please contact me if there is additional information that you would like me to provide to you with regards to 8(e) reference number 8EHQ-0802-13706.

Sincerely,

Karen Ruble

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MATERIAL SAFETY DATA SHEET

Revision Date: 06/10/2002
MSDSUSA/ANSI/EN/150000013213/Version 6.0

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name	"EpB" Cyclopropanemethanol
Product Identification Number(s)	15855-0N, P1585502, P1585503, P1585504, P1585500, P1585501, P1585505, P1585506, P158550A, P158550B, P158550C, P158550D, P1585507
Manufacturer/Supplier	Eastman Chemical Company, Kingsport, Tennessee 37662
MSDS Prepared by	Eastman Product Safety and Stewardship
Chemical Name	cyclopropanemethanol
Synonym(s)	044394
Molecular Formula	C4H8O
Molecular Weight	72.11
Product Use	chemical intermediate
OSHA Status	hazardous

For emergency health, safety & environmental information, call 800-EASTMAN.

For emergency transportation information, call CHEMTREC at 800-424-9300 or call 800-EASTMAN.

2. COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided.)

Weight %	Component	CAS Registry No.
100%	cyclopropanemethanol	2516-33-8

3. HAZARDS IDENTIFICATION

DANGER!
FLAMMABLE LIQUID AND VAPOR
HARMFUL IF INHALED, ABSORBED THROUGH SKIN, OR SWALLOWED
MAY CAUSE CARDIOVASCULAR SYSTEM DAMAGE BASED ON ANIMAL DATA
MAY CAUSE TESTICULAR DAMAGE BASED ON ANIMAL DATA
MAY CAUSE BLOOD DISORDERS BASED ON ANIMAL DATA
MAY CAUSE LIVER DAMAGE BASED ON ANIMAL DATA
CAUSES EYE IRRITATION
CAN DECOMPOSE AT ELEVATED TEMPERATURES
THE PHYSICAL-CHEMICAL PROPERTIES OF THIS MATERIAL HAVE NOT BEEN FULLY INVESTIGATED

HMIS® Hazard Ratings: Health - 3*, Flammability -3, Chemical Reactivity - 1

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

4. FIRST-AID MEASURES

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Eyes: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention immediately.

Skin: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.

Ingestion: Call a physician or poison control center immediately. Induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, dry chemical, carbon dioxide, alcohol foam

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire.

Hazardous Combustion Products: carbon dioxide, carbon monoxide

Unusual Fire and Explosion Hazards: Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Elevated temperatures can cause decomposition.

6. ACCIDENTAL RELEASE MEASURES

Use personal protective equipment. (See Section 8, EXPOSURE CONTROLS/PERSONAL PROTECTION.) Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

For Large Spills: Use water spray to disperse vapors and flush spill area. Prevent runoff from entering drains, sewers, or streams.

7. HANDLING AND STORAGE

Personal Precautionary Measures: Do not breathe mist or vapor. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.

Prevention of Fire and Explosion: Keep away from heat, sparks, and flame. Exercise caution if heating, especially in a closed container. Keep from contact with oxidizing materials. Use only with adequate ventilation. Comply with all national, state, and local codes pertaining to the storage, handling, dispensing, and disposal of flammable liquids.

Storage: Keep container tightly closed. Keep container in a well-ventilated place.
Additional Information: Store in a cool place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Country specific exposure limits have not been established or are not applicable unless listed below.

CYCLOPROPANEMETHANOL
Eastman Chemical Company occupational exposure limit:
Time Weighted Average (TWA): 0.01 ppm, 0.029 mg/m3

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation or other engineering controls to maintain airborne levels to an acceptable level.
Respiratory Protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: organic vapor, full-face positive-pressure air-supplied
Eye Protection: Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.
Skin Protection: Wear chemical-resistant gloves, boots, and protective clothing appropriate for the risk of exposure. Contact glove manufacturer for specific information.
Recommended Decontamination Facilities: eye bath, washing facilities, safety shower

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form: liquid
Color: colorless
Odor: slight
Specific Gravity: 0.908 (22 °C)
Vapor Pressure: 20 °C; 5.32 mbar
Vapor Density: 2.49
Boiling Point: 123 - 124 °C
Solubility in Water: complete
pH: neutral
Octanol/Water Partition Coefficient: P: 4.57; log P: 0.66
Flash Point: 34 °C (Setaflash closed cup)
Thermal Decomposition Temperature: 154 °C ; 119 J/g (DSC)

10. STABILITY AND REACTIVITY

Stability:	Stable.Material can decompose at elevated temperatures.Use caution when storing or processing material above 32.8 °C.
Incompatibility:	Material reacts with strong oxidizing agents, acid chlorides, acid anhydrides.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

General: May cause cardiovascular system damage based on animal data. May cause testicular damage based on animal data. May cause blood disorders based on animal data. May cause liver damage based on animal data.
Toxicity data are not available unless listed below.

Oral LD-50:(rat)	758 mg/kg
Inhalation LC-50: (female rat)	6 h: 2.5 mg/l
Dermal LD-50: (rat)	> 2,000 mg/kg (only dose tested)
Skin Irritation (rabbit)	very slight
Eye Irritation (rabbit, unwashed eyes)	moderate
Eye Irritation (rabbit, washed eyes)	moderate
Eye Irritation (in vitro)	moderate
Skin Sensitization: guinea pig:	none

12. ECOLOGICAL INFORMATION

Oxygen Demand Data:
BOD-5: 1,300 mg/g
BOD-20: 2,000 mg/g

COD: 2,260 mg/g

Acute Aquatic Effects Data:
96 h LC-50 (fathead minnow): > 98.9 mg/l (highest concentration tested)

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Contract with a licensed chemical disposal agency. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

14. TRANSPORT INFORMATION

Marine pollutant components: none unless listed below

DOT (USA): Class 6.1 Packing group II
Subsidiary Risk Class 3 Packing group III

ICAO Status: Class 6.1 Packing group II
Subsidiary Risk Class 3 Packing group III

IMDG Status: Class 6.1 Packing group II
Subsidiary Risk Class 3 Packing group III

15. REGULATORY INFORMATION

WHMIS (Canada) Status: controlled
WHMIS (Canada) Hazard Classification: B/2, D/1/A

SARA 311-312 Hazard Classification(s):
immediate (acute) health hazard
delayed (chronic) health hazard
fire hazard

SARA 313: none, unless listed below

Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

EINECS (European Inventory of Existing Commercial Chemical Substances): This product is listed on EINECS.
EINECS Number: 219-735-5
AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is not listed on the Korean inventory.

16. OTHER INFORMATION

Visit our website at www.EASTMAN.com or call 1-800-EASTMAN.

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information. Users should make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials, the safety and health of employees and customers, and the protection of the environment.